

ABSTRACT

A system for automatically lowering an effective gear ratio between an input gear, driven by a rotary power source, and an output gear that drives a driven load. A variance gear is interposed coaxially between the input gear and output gear. The input gear normally drives the output gear through an upper motion transfer gear, an upper variance gear, a lower variance gear, and a lower motion transfer gear. When resistance to rotation is presented to the output gear the upper and lower variance gear begin planetary motion around the lower motion transfer gear, rotate the lower motion transfer gear and output gear more slowly, and thereby lower the effective gear ratio between the input and output gears.